L 46155-65

ACCESSION NR: AT5007934

system without substantial lowering of the shunt-impedance at the ring's output. The phase volume of the beam is connected with the emittance of the beam by the relation $\nu = \frac{\beta}{\sqrt{1-\beta^2}}$ and is an invariant quantity. A similar relation exists between the capacity and the acceptance of the channel. The specific acceleration is the ratio of the increment of energy of a synchronous particle per wave length to the rest energy. The synchronous phase is read off from the maximum of the field. The shunt-impedance is measured as the quotient of twice the high-frequency power loss in the copper divided by the square of the amplitude of the accelerating field. Values of the shunt-impedances and of the Q factor are taken with a three-halves allowance relative to the computed quantities. The frequency of the accelerating field was chosen lower than that in the injectors of the proton synchrotrons of CERN and Brookhaven. The choice of a 150 mc frequency was dictated mainly by the desire to obtain sufficiently high capacity for the channel. The length and, correspondingly, the cost of the injector were therefore increased somewhat, which, however, is compensated by a lowering of the high-frequency power loss in the resonators. The capacity of the focusing channel equals 0.4 cm·millirad, which ensures the possibility of raising the output current of the injector up to 100 milliamperes for a beam phase volume of 0.1 cm·millirad (I. M. Kapchinskiy, *Atomnaya*

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energiya, 13, 235 (1962)). For the chosen values of the specific acceleration and of the synchronous phase, the longitudinal Coulomb repulsion does not limit the beam current until the extreme space charge values are reached, which are determined by the transverse lateral repulsion (I. M. Kapchinskiy, A. S. Kronrod, present conference, p. 906). It is assumed that the acceleration will be mainly due to the energy preliminarily stored in the resonators. The field drop during the 12 μsec proton pulse amounts to approximately 15% and will be corrected by the generator's focusing during the proton current pulse, for which standby power is provided. In addition, it is proposed that the initial value of the synchronous phase should be increased. The capacity of the synchrotron's ring chamber equals 1 cm·millirad, which permits realization of a three-revolution injection of about 40 μsec duration for a correspondingly lower beam current. Such an injection scheme is provided as an alternative to other schemes. The present report discusses in detail the radio engineering aspects of the system, the focusing system, and the design. "The design of the injector was carried out under the scientific guidance of V. V. Vladimirskiy and A. L. Mints. The design was developed by the joint participation of the following associates of the Institute of Theoretical and Experimental Physics, GKAE SSSR, the Radio Engineering Institute AN SSSR, the Scientific-Research Institute of Electro-physical Equipment imeni D. V. Yefremov GKAE SSSR and other organizations: M. I. Basalayev, V. A. Batalin, Yu. P. Vakhrushin, Ye. N. Danil'tsev,

L 46155-65

ACCESSION NR: AT5007934

13

A. A. Zhdanko, F. G. Zheleznikov, N. M. Kristi, N. I. Kisin, N. V. Kovalev, K. M. Kozlov, N. S. Podoynitsyn, A. V. Popkovich, I. M. Royfe, V. F. Semenov, A. V. Solnyshkov, N. K. Titov, and others." Orig. art. has: 2 figures, 2 tables.

ASSOCIATION: Radiotekhnicheskiy institut AN SSSR (Radio Engineering Institute, AN SSSR)

SUBMITTED: 26May64 ENCL: 00 SUB CODE: NP

NO REF SOV: 005 OTHER: 000

Card 4/4

KHOLDIN, S.A., prof., otv. red.; RAKOV, A.I., prof., red.; LAZAREV, N.V., zasl. deyatel' nauki prof., red.; TOBILEVICH, V.P., prof., red.; NECHAYEVA, I.D., doktor med. nauk, red., KAUFMAN, B.D., kand. med. nauk, red.; SHABASHOVA, N.Ya., kand. med. nauk, red.; PETROV, A.N., red.

[Current problems of oncology; festschrift for the 70th birthday and the 45th anniversary of the scientific and civic activity of Member of the Academy of Medical Sciences of the U.S.S.R. Professor Aleksandr Ivanovich Serebrov, and consisting of papers by his students and coworkers, as well as by distinguished scientists in the field of cancer control] Sovremennye problemy onkologii; sbornik posviashchen 70-letiiu so dnia rozhdeniia i 45-letiiu nauchnoi i obshchestvennoi deiatel'nosti deistv. chl. AMN SSSR professora Aleksandra Ivanovich Serebrova i sostoit iz rabot ego uchenikov i sotrudnikov, a takzhe vidnykh uchenykh - soratnikov po protivorakovoi bor'be. Leningrad, Meditsina, 1965. 245 p. (MIRA 18:6)

1. Akademiya meditsinskikh nauk SSSR, Moscow. Institut onkologii. 2. Chlen-korrespondent AMN SSSR (for Kholdin, Rakov).

ALIKISHIBEKOV, M.M., doktor [illegible]; MAKSIMOV, A.S., kand.[illegible]; ROGIN, D.L., kand.med.nauk; [illegible], N.V., prof.

Reviews. Vop. onk. [illegible] 15.

(MIRA 18:8)

LAZAREV, N.V.; FELISTOVICH, G.I.

Products of nuclein metabolism and the growth of blastomas.
Vop. onk. 11 no.12:54-60 '65. (MIRA 19:1)

1. Iz laboratorii lekarstvennykh metodov profilaktiki i lecheniya zlokachestvennykh novoobrazovaniy (zav. - zasluzhennyy deyatel' nauki prof. N.V. Lazarev) Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov).

L 6924-66 EWT(1)/EWA(h)

ACC NR: AP5026819 SOURCE CODE: UR/0286/65/000/017/0095/0095

INVENTOR: Khil'chevskiy, G. L.; Voytsekhov, Yu. R.; Tul'chinskaya, K. V.; Lazarev, N. V.; Vodolagin, V. Yu.

58
B

ORG: none

TITLE: An ultrasonic pickup.[10] Class 42, No. 174452 [announced by Experimental Research and Design Office of the Black Sea Council of National Economy (Eksperimental'no-issledovatel'skoye i konstruktorskoye byuro Chernomorskogo Sovnarkhoza)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 95

TOPIC TAGS: piezoelectric transducer, ultrasonic inspection, waveguide

25

ABSTRACT: This Inventor's Certificate introduces an ultrasonic pickup designed for studying gaseous media. The device consists of a housing containing a piezoelectric transducer and a waveguide. Interference from the walls of the vessel being monitored is absorbed by making the housing in the form of a cylindrical labyrinth with rifling.

SUB CODE: EC,IE/ SUBM DATE: 05Oct64/ ORIG REF: 000/ OTH REF: 000

Card 1/2 UDC: 534.232-8

L 6994-66

ACC NR: AP5026819

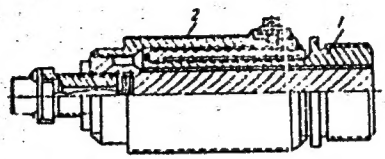

Fig. 1. 1 - housing; 2 - rifling.

Card 2/2 sdo

LAZAREV, N.V.

Antiblastomogenic agents. Vop. onk. 11 no.12:48-54 '65.
(MIRA 19:1)

1. Iz Instituta onkologii AMN SSSR.

LAZAREV, P.I.

We expand and strengthen our production center. Sel' stroi. 13 no.8:9-10 Ag '58. (MIRA 11:9)

1.Predsedatel' soveta Sasovskoy mezhkolkhoznoy stroitel'noy organizatsii Ryazanskoy oblasti.
(Sasovo District--Farm buildings)

LOSKUTOV, Vladimir Vasil'yevich; KHORDAS, Georgiy Saulovich. Prinimal uchastiye: LAZAREV, P.L., inzh., YANOVSKIY, V.Ya., nauchnyy red.; NIKITINA, R.D., red.; TSAL, R.K., tekhn.red.

[Thermal calculations of ship systems] Teplovye raschety sudovykh sistem. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1958. 199 p. (MIRA 12:4)

(Ships--Heating and ventilation)

LAZAREV, P.M.

Use of rotating electric drum furnaces for firing marshalite.
Prom. energ. 15 no.7:14-15 Jl '60. (MIRA 15:1)
(Electric furnaces)
(Marshalite)

LOSKUTOV, Vladimir Vasil'yevich; KHORDAS, Georgiy Saulovich. Prinimal uchastiye LAZAREV, I.L., inzh.; ALEKSANDROV, A.V., dots., kand. tekhn. nauk, retsenzent; MOCHUL'SKIY, A.A., inzh.; GUS'KOV, M.G., nauchn. red.; OZEROVA, Z.V., red.; SHISHKOVA, L.M., tekhn. red.

[Hydraulic calculations of ship systems] Gidravlicheskie raschety sudovykh sistem. Leningrad, Sudpromgiz, 1963. 311 p. (MIRA 17:3)

L 49455-65 EWP(m)/EPR/EWA(h)/EWT(l)/FCS(k)/EWA(d)/EWA(c) Pd-1/Pi-4 MW

ACCESSION NR: AT5008979 UR/2504/64/030/000/0221/0235

36
32
B+1

AUTHOR: Lazarev, P. P.

TITLE: Calculation of the gasdynamic and thermodynamic parameters of gases behind incident and reflected shock waves

SOURCE: AN SSSR. Fizicheskiy institut. Trudy, v. 30, 1964. Fizicheskaya optika, 221-235

TOPIC TAGS: gasdynamic parameter, thermodynamic parameter, gas mixture, shock wave, molecular density

ABSTRACT: The author describes a method for calculating the parameters of gas behind incident and reflected shock waves in an arbitrary mixture of gases. These parameters are needed for the calculation of the molecules concentration in the gas. It is pointed out that the published data pertain to the parameters of gases behind the incident shock wave only, and that there are no calculations for the reflected wave. The one-dimensional problem is considered and it is assumed that the dissociation rate is so large that thermodynamic equilibrium is established in-

Card 1/2

L 49455-65
ACCESSION NR: AT5009879

mediately behind the front of the shock wave. This necessitates the solution of the equations of gasdynamics and a system of equations for chemical equilibrium. The computations were made with an electronic computer and the results are tabulated for N_2 and for CO, and also a mixture of CO + N_2. "I thank B. A. Vorob'yev, T. F. Norel', and L. L. Babcovich for valuable advice." Orig. art. has: 25 formulas and 5 tables.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Physics Institute, AN SSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: ME

NR REF SOV: 007 OTHER: 000

Card 2/2

LAZAREV P. S.

"How to protect the young from diseases." Chelyabinsk, Chelyabinsk RSFSR State Publishing House, 1952. 102 pages, price 1 ruble, 40 kopeks, 5,000 copies. (Livestock-Breeder's Library)

SO: Veterinariya 26(5). May 1953

30

LAZAREV, P.S.; FEDOROV, A.I., prof.; BUKHTILOV, F.N., dotsent; PAVLOV, P.I., dotsent; ZASLONOV, M.S.; PLEKHANOV, B.P.; Prinimali uchastiye: GRIBOVSKIY, G.P., veterinarnyy vrach; RYBAKOVA, A.V., veterinarnyy vrach

Some characteristics of the course of rabies in cattle. Veterinariia 39 no.9:20-22 S '62. (MIRA 16:10)

1. Troitskiy veterinarnyy institut (for Lazarev, Fedorov, Bukhtilov, Pavlov). 2. Direktor Troitskoy mezhsovkhoznoy veterinarno-bakteriologicheskoy laboratorii (for Zaslonov). 3. Glavnyy veterinarnyy vrach Bredinskogo rayona, Chelyabinskoy oblasti (for Plekhanov).

TURUSOV, V.M., inzh., LAZAREV, P.S., inzh.

Devices for fitting-in into operating petroleum pipe lines.
Izobr.i rats. no.7:9-10 Jl '58. (MIRA 11:9)

1. Neftepromyslovoye upravleniye "Pervomayneft'."
(Petroleum--Pipe lines)

LAZAREV, P. S., FEDOROV, A. I. (Professors), BUKHTILOV, F. N., PAVLOV, P. I. (Docents, Troitsk Veterinary Institute), Zaslonov, M. S. (Director of the Troitsk Intersovkhoz Veterinary Bacteriological Laboratory) and PLEKHANOV, B. P. (Head Veterinary Doctor of the Bredinsk District, Chelyabinsk, Oblast')

"Certain characteristics of the course taken by rabies in cattle"

Veterinariya, vol. 39, no. 9, September 62, p. 20

LAZAREV, P.S., prof.; FEDOROV, A.I., prof.; BUKHTILOV, F.M., prepodavatel'; KAMYMIN, I.N., prepodavatel'; KONDAKOV, A.P., aspirant; AMELIN, I.P.; ZAYNIKAYEV, M.Sh., veterinarnyy vrach

Malignant course of foot-and-mouth disease. Veterinariia 41 no.5: 39-42 My '64. (MIRA 18:3)

1. Troitskiy veterinarnyy institut (for Lazarev, Fedorov, Bukhtilov, Kamymin, Kondakov). 2. Nachal'nik Chelyabinskogo oblastnogo veterinarnogo otdela (for Amelin).

LAZAREV, Petr Vasil'yevich; SOLODKOV, V.A., red.; TIKHONOVA, Ye.A., tekhn. red.

[System and practices in the operation of motorships of the "Uglegorsk" type] Ustroistvo i opyt tekhnicheskoi ekspluatatsii teplokhodov tipa "Uglegorsk." Moskva, Izd-vo "Morskoi transport," 1958. 201 p. (MIRA 11:7)

(Motorships)

LAZAREV, P.V.

3(5) PHASE I BOOK EXPLOITATION SOV/1886

Vsesoyuznaya nauchnaya sessiya po metallogenicheskim i prognoznym kartam: Materialy nauchnoy sessii po metallogenicheskim i prognoznym kartam; (Materials Presented at the Scientific Session on Metallogenetic and Postulated Ore Occurrence Maps; Reports) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958. 318 p. Errata slip inserted. 3,850 copies printed.

Ed.: A.S. Pogrebov; Tech. Ed.: P.P. Alferova.

Sponsoring Agencies: (1) Akademiya nauk SSSR, (2) Akademiya nauk Kazakhskoy SSR, Alma-Ata, (3) USSR. Ministerstvo geologii i okhrany nedr, (4) Kazakh SSR. Ministerstvo geologii i okhrany nedr.

PURPOSE: This book is intended for exploration geologists, mining engineers, and cartographers.

TABLE OF CONTENTS:

Card 1/0

LAZAREV, P.V.; PROKIN, V.A.; GOLUB, Yu.B., nauchn. red.; YEZDROVA, V.I., red.

[Prospecting the copper-pyrite deposits of Bashkiria] Opyt provedeniia poiskovykh i razvedochnykh rabot na medno-kolchedannykh mestorozhdeniiakh Bashkirii. Moskva, Gos. geol.kom-t SSSR, 1963. 47 p. (MIRA 17:9)

VODOREZOV, G.I.; DEMCHUK, A.I.; LAZAREV, P.V.; SKRIPIL', V.I.

Ivan Vasil'evich Lennykh; 1901-1961, obituary. Mat. po geol. i pol. iskop. IUzh. Urala no. 3:3-4 '62.

LENNYKH, I.V. [deceased]; [illegible], P.V.

Geological position [illegible] of pyrite deposits in the [illegible]
Urlas. Mat. po geol. i pol. iskop. Ural'sk. Urala no. 3 [illegible]
[illegible] 17:7

VASIL'YEV, V.K.; LAZAREV, R.B.

Oscillographic registration and measurement of the hysteresis loops of small ferromagnetic cores. Trudy MEI no.49:68-84 '63. (MIRA 17:3)

S/035/62/000/002/024/052
A001/A101

AUTHORS: Fialko, Ye. I., Lazarev, B. G.

TITLE: On the value of index s for meteoric streams Perseids and Geminids of 1957 - 1958 and for sporadic meteors

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 2, 1962, 60, abstract 2A501 ("Astron. tsirkulyar", 1960, 15 sentyabrya, no. 214, 18-20)

TEXT: The authors analyze relationships N(t) and s(t) characterizing hourly numbers of detected meteors and frequencies p(s) of occurrence of the magnitude s for intervals $\Delta s = 0.1$. The Perseid streams of 1957 and 1958 and Geminid streams of 1957 and 1958 were considered and compared with relationships N(t) and s(t) for the sporadic background. The authors draw the conclusions: distributions of p(t) and N(t) for the 1957 Perseid stream are of a compact nature and have one broad maximum. The structure of the 1958 Perseid stream is considerably more complicated, 2 maxima are noted. The Geminid stream is of a somewhat less compact distribution. Functions p(s) and N(s) characterizing the sporadic background differ noticeably from distributions

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L 24256-66 FSS-2/EWT(1)/EWA(d) GW/WR

ACC NR: AR6005264 SOURCE CODE: UR/0058/65/000/009/H052/H052

32
B

AUTHORS: Glazov, G. N.; Lazarev, R. G.

TITLE: One statistical method of determining the radiants of meteor streams

SOURCE: Ref. zh. Fizika, Abs. 9Zh368

REF. SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 163-164

TOPIC TAGS: meteor stream, meteor radiant, meteor burst communication, radar reflector

ABSTRACT: In connection with the fact that in radar observations it is impossible in many cases to separate the meteors of the streams from the sporadic ones, and the "normal" reflections from the "abnormal" ones, it is proposed that the basis for the statistical method of determining the radiants of the meteor streams be chosen to be not the smallest values of the slant ranges of the meteors, but the average values. P. B. [Translation of abstract]

SUB CODE: 03

Card 1/1 dla

L 9618-66 EWT(1)/FCC GW

ACC NR: AR5018945 UR/0269/65/000/007/0065/0065
523.53+525.32

SOURCE: Ref. zh. Astronomiya. Otdel'nyy vypusk, Abs. 7.51.553

AUTHOR: Lazarev, R.G.

TITLE: Bowen's hypothesis (in accordance with observation data obtained in Tomsk)

CITED SOURCE: Astron. tsirkulyar, no. 301, Maya 27, 1964, 2-4

TOPIC TAGS: moon, lunar phenomenon, meteor, meteor observation

TRANSLATION: According to E.G. Bowen's hypothesis, the moon, in changing its position in the orbit, affects the number of meteors and the amount of precipitation. Diagrams are given on the dependance on lunar phases of the average hourly number of meteors and of the amount of precipitation, according to radar and meteorological observation conducted in Tomsk in 1957-1960. The author finds that, generally speaking, the results of the observations confirm Bowen's data.

SUB CODE: 03 ENCL: 00

Card 1/1

L 9210-66 EWT(1)/EWA(d) GW

ACC NR: AR6000138 SOURCE CODE: UR/0058/65/000/008/H057/H057

SOURCE: Ref. zh. Fizika, Abs. 8Zh390

AUTHORS: Lazarev, R. G.; Fialko, Ye. I.

ORG: none

TITLE: Concerning the distribution of meteoric bodies by masses in the meteor swarms of the Quadrantides, Perseids, and Geminides

CITED SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 93-97

TOPIC TAGS: meteor observation, distribution function, meteor stream, radio echo

TRANSLATION: Results are presented for determining the average values of the parameter s of the mass distribution function of meteoric bodies in the Quadrantide, Perseid, and Geminide swarms and the sporadic background and dispersion of this parameter. The authors consider the distributions of the frequency of appearance of the quantity s after a definite observation time, the number of radio echoes with duration larger than 1 second, and the number of radio echoes of all durations. P. B.

SUB CODE: 03, 09

Card 1/1

L 6341-66 EWT(1)/EWA(d) GW
ACC NR: AP5025624 SOURCE CODE: UR/0033/65/042/005/1075/1083

AUTHOR: Lazarev, R. G. 55

ORG: Tomsk State University (Tomskiy gosudarstvennogo universitet) 55

TITLE: The frequency of sporadic meteor bodies 12,55

SOURCE: Astronomicheskiy zhurnal, v. 42, no. 5, 1965, 1075-1083

TOPIC TAGS: meteor observation, meteor radiant, interplanetary space

ABSTRACT: Studies of the parameters of the radiants of sporadic meteors are reviewed [N. Staude, Zusate von C. Hoffmeister *Astron Nachr.* 218, 155, 1923], [C. V. Shiaparelli, *Bull. Meterol. Osserv. Coll. Romano* 5, N8, 10, 11, 12 (Rus. Per: Sborn. Moskovskogo Matem. Obshchestva 4, 124, 1870)]. The Staude-Hoffmeister integral and the Staude formula can be generalized to derive a formula for the uniform distribution of true radiants which yields an expression for the mean annual distribution of true radiants (for distribution in ecliptic latitude and ecliptic longitude) and determines the elliptical distribution of true radiants in the plane of the ecliptic.

UDC: 523.531

Card 1/2

L 6341-66
ACC NR: AP5025624

The Staude formula is also used in deriving an expression for the heliocentric velocity of meteor particles. These formulas give the amplitude of the diurnal variation and the ratio encountered to overtaking particles or bodies moving in interplanetary space with a velocity approximately equal to the earth's orbital velocity. The same information can be obtained for different velocities. When the number of encountered objects exceeds the number of overtaking meteor bodies, when the opposite is true and when they are equal are then determined. Orig. art. has: 35 formulas, 3 figures.

SUB CODE: AS/ SUBM DATE: 13Feb65/ ORIG REF: 009/ OTH REF: 008

nw

Card 2/2

L 23914-66 EWT(1)/EWA(d) GW

ACC NR: AR6005262 SOURCE CODE: UR/0058/65/000/009/H052/H052

39
B

AUTHOR: Lazarev, R. G.

TITLE: On the diurnal and seasonal variation of the hourly number of meteors

12

SOURCE: Ref. zh. Fizika, Abs. 9Zh366

REF. SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 86-92

TOPIC TAGS: radar meteor observation, meteor trail, diurnal variation

ABSTRACT: The problem is considered of the diurnal and seasonal variation of the number of meteor radio echoes on the basis of the observations of the "TPI-2" station (Tomsk). An explanation is given for the asymmetry of the variational curve. It is concluded that the meteoric orbits are distributed along the earth's orbit. [Translation of abstract]

SUB CODE 03

Card 1/1 BK

L 08656-67 EWT(1) GW
ACC NR: AR6019484 SOURCE CODE: UR/0269/66/000/002/0075/0075

39

AUTHOR: Lazarev, R. G.

ORG: none

TITLE: Daily and seasonal variations of hourly numbers of meteors, Part II.

SOURCE: Ref. zh. Astronomiya, Abs.2.51.579
REF SOURCE: Izv. Tomskogo politekhn. in-ta, v. 131, 1965, 3-16
TOPIC TAGS: meteor, diurnal variation, meteor radiant, harmonic analysis

ABSTRACT: Daily and seasonal annual mean variations of hourly numbers of meteor radio echos were analyzed by means of harmonic analysis. A new index of meteor activity was proposed and used to analyze data obtained at four stations, two in the northern and two in the southern hemisphere. The asymmetry of the curves showing the seasonal variations of this index was due to the asymmetrical distribution of visible radiants with respect to the apex. The maximum power of the antisolar source was 1.38 times as great as the power of the solar source.

SUB CODE: 03/ SUBM DATE: none

ACC NR: AT6033995 SOURCE CODE: UR/3227/64/003/000/0086/0092

AUTHOR: Lazarev, R. G.

ORG: none

ACC NR: AT6033995

activity which is characterized by the relative distri: tion of meteor orbits along the orbit of the earth was obtained. 3) D ta obtained at Tomsk, Khar'kov, and New Zealand agree the basic parame ers of the equipment are similar. Orig. art. has: 7 figures and : tables.

SUB CODE: 03/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 003

Card 2/2

ACC NR: AT6033996 SOURCE CODE: UR/3227/64/003/000/0093/0097

AUTHOR: Lazarev, R. G.; Fialko, Ye. I.

ORG: none

TITLE: Problem of meteor mass distribution in the meteor streams of Quadrantids, Perseids, and Geminids

SOURCE: Tomsk. Institut radioelektroniki i elektronnoy tekhniki. Trudy, v. 3, 1964, 93-97

TOPIC TAGS: meteor stream, meteor observation

ABSTRACT: Three distributions of the parameter s are considered: p(s) - frequency of occurrence of s over a definite period of observation; $N_1(s)$ - number of radio echoes longer than 1 sec observed in all 1-hr intervals of the period of observation; N(s) - same, but radio echoes of all durations. Mean values of s and dispersion D (or mean effective deviation $\Delta s = \sqrt{D}$) are determined for 1958 streams of Quadrantids, 1957-58 Perseids, and 1957-58 Geminids, and also for the sporadic background. It is found that: (1) The total value of Δs depends on several

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ACC NR: AT6033996

factors: (a) in actuality, parameter s does not remain constant for a given stream, (b) effect of the sporadic background and possibly other streams, (c) meteors that have different velocities are taken into account, (d) the threshold-signal power varies; the total value of Δs does not exceed ±10%; hence, the measurement error is under 10%; (2) For the stream of Quadrantids, p(s) and N(s) decrease with increasing s; (3) Distributions p(s) and particularly N_1(s) and N(s) for the streams of Perseids have two distinct maxima which correspond to $s = 1.50$, $s = 1.80$ for 1957 and $s = 1.40$, $s = 1.80$ for 1958; on the whole, the distribution is compact; (4) A less compact distribution corresponds to the stream of Geminids; (5) Functions p(s) and N(s) of the sporadic background clearly differ from p(s) and N(s) that correspond to the streams. Orig. art. has: 2 figures, 1 formula, and 2 tables.

SUB CODE: 03 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 001

Card 2/2

ACC NR: AR6035542 SOURCE CODE: UR/0269/66/000/010/0048/0048

AUTHOR: Nazarenko, M. K.; Lazarev, R. G.

TITLE: Radar observations of the 1965 Leonids meteor shower

SOURCE: Ref. zh. Astronomiya, Abs. 10.51.353

REF SOURCE: Astron. tsirkulyar., no. 362, marta 17, 1966, 1-3

TOPIC TAGS: meteor stream, meteor observation, Leonid meteor stream, stream radiant, stream meteor, sporadic meteor, meteor shower

ABSTRACT: The results of radar measurements carried out at Tomsk of the number of meteors and the duration of meteor radio reflections in the epoch of Leonids from 12 to 19 November 1965 are given. The parameters of the equipment were as follows: wavelength, 10 m; pulse power, 50 kw; pulse duration 5 μsec, and sending frequency was 600 cps. A wave-duct-type six-element antenna was turned along the azimuth and the elevation following the daily motion of the stream radiant. For this equipment, in the morning hours, the sporadic rate amounted to not more than 250—300 hr^{-1}. The maximum number of meteors

Card 1/2 UDC: 523.164.85

ACC NR: AR6035542

in the stream was 711 hr^{-1}, recorded at 8:00--9:00 hours local time on 17 November. From the distribution of the radio reflections according to duration, the values of the parameter s of the mass distribution of meteor bodies have been found: $s = 1.45 \pm 0.04$ for 16 November, $s = 1.75 \pm 0.10$ for 17 November, and $s = 3$ for the remaining days of shower activity. 141 radio reflections with a duration > 1 min. and one reflection with a duration of 570 sec were recorded. A complete shower structure was observed. The dimensions of the central nucleus of the shower, with a great quantity of large particles, are $3.24 \cdot 10^6$ km along the Earth's orbit. The total length of Earth-orbit sector within the stream was $2 \cdot 10^7$ km. V. Lebedients. [Translation of abstract] [DW]

SUB CODE: 03/

Card 2/2

1. LAZAREV, S.
2. USSR (600)
4. Medicine, Industrial
7. At the tractor plant. Sov. kras. krest 3, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

LAZAREV, S.

Red Cross - Azerbaijan

With the oil workers of Azerbaijan. Sov. kras. krest 3, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

LAZAREV, S.

A good start. Sov.kras.krest 4 no.1:15-17 Ja-Mr '54. (MLRA 7:4)
(Hygiene, Rural)

LAZAREV, S.

Remarks on S.S.Slobodiannikov's book "Extending the life of parts of ship mechanisms." Mor. i rech.flot 14 no.10:30-31 O '54. (MLRA 7:11)
(Ships--Maintenance and repair)

LAZAREV, S.

Yugoslavia (430)

Agriculture -- Plant & Animal Industry

Importance of proper determinations of flow of torrents in regulation projects. p 25.
Activities of the Sarajevo branch of the former Yugoslav Forestry Society. p. 41.
Narodni Sumar, Vol. 5, no. 1 January 1951.

East European Accessions List. Library of Congress, Vol. 2, no. 4, April 1953. UNCLASSIFIED.

LAZAREV, S.

"Controlling small creeks, ravines, and brooks." p. 84. (NARODNI SUMAR, Vol. 5, no. 2/3, Feb./Mar. 1951, Sarajevo, Yugoslavia)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress. August, 1953, Uncl.

LAZAREV, SERGIJE

Uredenje bujica; udzbenik za srednje sumarske skole. Sarajevo, Svjetlost, 1952.
183, xix p. (Regulations of torrents; a textbook for secondary schools of forestry. illus., diagrs., tables.)
CU Not in DLC

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

Monthly

LAZAREV, S.

Soil erosion and the afforestation of eroded terrains. p. 293.

NARODNI SUMAR. (Drustvo sumarskih inzenjera i tehnicara Bosne i Hercegovine) Sarajevo, Yugoslavia. Vol. 12, no. 4/6, Apr./June 1958.

Monthly List of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1960.

Uncl.

Lazarev, S.

BULGARIA/Forestry - Forest Plants. K-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10630

Author : Lazarev, S.
Inst : -
Title : Reforestation in the Past (in Bulgaria)

Orig Pub : Gorsko stopanstvo, 1957, 13, No 3, 122-124.

Abstract : No abstract.

Card 1/1

The Isotropic and Anisotropic Components of the Even Photomagnetic Effect

S/020/60/135/006/015/037
B019/B056

constants characterizing the semiconductor; e_{ikl} is an antisymmetrical tensor; $\vec{n}$ are the components of the internal surface normal of the semiconductor; and H_i, H_k, and H_l are the components of the magnetic field. The last term in (2) describes the anisotropy of the photomagnetic effect, indicating that the even photomagnetic effect may be observed not only in the direction of the magnetic field, but in any direction, especially perpendicularly to the magnetic field; this is the case even if $\theta = \pi/2$, where θ is the angle between the surface normal and the magnetic field. The authors verified these results of the phenomenological theory, using a disk-shaped single crystal of Ge cut out perpendicularly to the [111] axis. From the results obtained the authors conclude that formula (2) may be used, not only for weak, but also for strong magnetic fields; however, the coefficients L_1 and L_2 must be considered to depend on the magnetic field. It further turned out that the isotropic and anisotropic components of the photomagnetic emf depend on the magnetic field, and may have different signs. The authors thank

87400

The Isotropic and Anisotropic Components of the Even Photomagnetic Effect

S/020/60/135/006/015/037
B019/B056

I. G. Kharitonenkov for taking part in the experiments. There are 2 figures and 6 references: 5 Soviet and 1 US.

SUBMITTED: September 1, 1960

Card 3/3

86926

S/056/60/039/005/043/051
B006/B077

24.3600 (1106, 1114, 1160)

AUTHORS: Kikoin, I. K., Lazarev, S. D.

TITLE: Anisotropy of the Even Photomagnetic Effect in n-Type Germanium at Low Temperatures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 5(11), pp. 1471 - 1473

TEXT: At room temperature the anisotropy of the even photomagnetic effect in germanium can be described fairly well with phenomenological equations of Yu. Kagan and Ya. A. Smorodinskiy in a field up to 20,000 oe but an investigation of the temperature dependence of the even photomagnetic effect at low temperatures showed that its anisotropy runs in an anomalous manner. The present "Letter to the Editor" reports about such investigations on an n-type germanium single crystal. The spherical sample was arranged so that the [111] axis coincided with the normal $\vec{n}$ of the irradiated surface. The field direction $\vec{H}$, the exposure direction, and the direction where the even photomagnetic e.m.f. was measured corresponded to the coordinate directions x,y,z. In the z-direction,

Anisotropy of the Even Photomagnetic Effect in n-Type Germanium at Low Temperatures

S/056/60/039/005/043/051
B006/B077

besides an even, also an odd photomagnetic e.m.f. occurred which could be excluded by measuring in two different $\vec{H}$-directions. This even photomagnetic e.m.f. (E_q) can be described through the above mentioned phenomenological equation as

$E_q = \frac{1}{3\sqrt{2}} LH^2 \sin^2\theta . \cos 3\varphi$, where φ is the angle of rotation of the sample about $\vec{n}$, θ is the angle between $\vec{n}$ and z, L is a material constant. The sample was rotated about $\vec{n}$ and also about z (in order to change φ and θ). The formula describes quite well the experimental results as obtained at nitrogen temperature and at room temperature for the φ dependence of the even photomagnetic e.m.f. The θ dependence at 78°K is entirely different from that at room temperature. This dependence is illustrated in Fig.1. The extreme values of E_q are plotted on the ordinate and correspond to the values $\varphi = \pi/3, 2\pi/3, \ldots$. Fig. 2 shows E_q as a function of H at various θ.

There are 2 figures and 4 Soviet references.

SUBMITTED: August 20, 1960

Card 2/6

86926

S/056/60/039/005/043/051
B006/B077

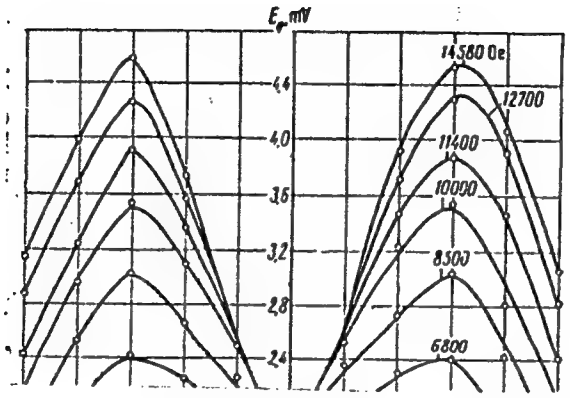

Fig.1

Card 3/6

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B006/B077

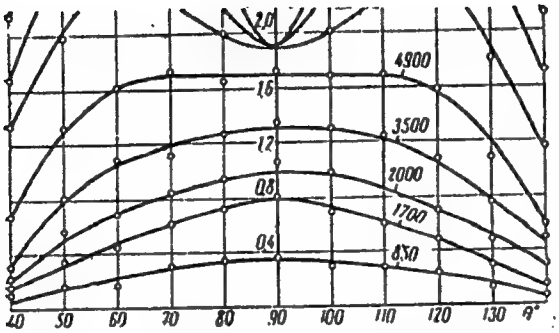

Fig. Рис. 1

Fig.1

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B006/B077

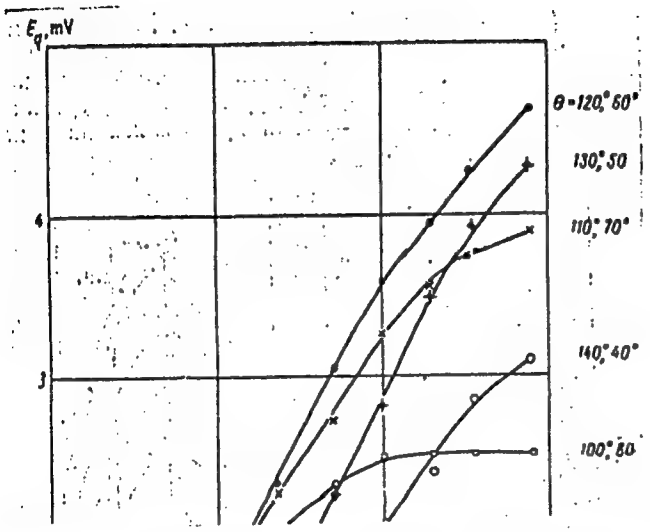

Fig.2

Card 5/6

86926
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B006/B077

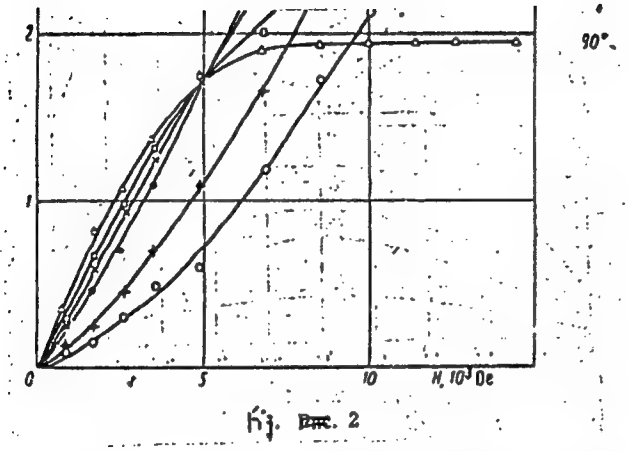

Fig. 2

Рис. 2

Card 6/6

KIKOIN, I.K.; LAZAREV, S.D.

Anisotropy of the odd photomagnetic effect. Zhur.eksp.i teor.fiz. 41 no.4:1332-1333 O '61. (MIRA 14:10)
(Photomagnetic effect)

L 8444-65 EWT(1)/EWG(k)/T Pz-6 IJP(c)/AS(mp)-2/SSD/AFWL/ASD(a)-5/ESD(gs)/ESD(t)/RAEM(t) AT

ACCESSION NR: AP4043662 S/0056/64/047/002/0780/0781

AUTHOR: Kikoin, I. K.; Lazarev, S. D. B

TITLE: New photopiezoelectric effect in semiconductors

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964, 780-781

TOPIC TAGS: photopiezoelectric effect, photopiezoelectricity, piezoelectric effect, piezoelectricity, photoelectric effect, carrier diffusion, germanium, semiconductor

ABSTRACT: When a rectangular n-type germanium single crystal is spotlighted with a beam illuminating only the central portion of its (111) plane, and, at the same time, the crystal is subjected to one-sided pressure along its longer axis, a potential difference develops between the end terminals which can be easily detected with a galvanometer. A 180° rotation of the sample about its piezoelectric axis, with the direction of the light beam and the position of the electrodes unchanged, reverses the sign of the potential difference; a similar 90° rotation reduces the potential differ-

Card 1/2

L 8444-65
ACCESSION NR: AP4043662

0

ence by more than one order of magnitude; the effect becomes vanishingly small if the (100) plane instead of the (111) plane is illuminated. This phenomenon, never before observed, termed the photopiezoelectric effect by the authors, is tentatively explained by the anisotropy of the carrier diffusion coefficient, caused by the one-sided deformation of the crystal, the diffusion being brought about by the difference of carrier concentration on the illuminated and the nonilluminated side of the sample. The investigation is being continued and extended to other semiconductors. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 03Jun64 ATD PRESS: 3098 ENCL: 00

SUB CODE: EM, SS NO REF SOV: 000 OTHER: 001

Card 2/2

L 00755-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/AT

ACCESSION NR: AP5021730 UR/0386/65/002/002/0075/0077

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

TITLE: Anisotropy of the odd-parity photomagnetic effect in germanium in strong effective magnetic fields

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 2, 1965, 75-77

TOPIC TAGS: photomagnetic effect, germanium semiconductor, semiconductor research, semiconductor theory

ABSTRACT: Previous studies have shown anisotropy in both the even- and odd-parity photomagnetic effects in germanium. A microscopic theory for anisotropy of the photomagnetic effects was recently developed by Kagan and Sobakin (Yu. Kagan, V. Sobakin, *J. Phys. Chem. Solids*, 26, 1965 [in press]). According to this theory, when $\omega \gg \tau$ (ω is the cyclotron frequency of the carriers and τ is relaxation time), a unique anomaly should be observed in the anisotropic component of the odd-parity photomagnetic emf V as a function of the angle θ between the direction of the magnetic field and the normal to the illuminated surface of the semiconductor. The

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L 00755-66

ACCESSION NR: AP5021730

6

authors measured the odd-parity photomagnetic emf in *n*- and *p*-germanium at 77°K. The angular effect on odd-parity photomagnetic emf in various field strengths for both types of germanium is shown in fig. 1 of the Enclosure. The odd-parity anisotropic photomagnetic emf is given as a function of magnetic field strength *H* at various values of the angle θ for both types of germanium in fig. 2 of the Enclosure. The experimental results show extremely good agreement with the Kagan-Sobakin theory. "The authors are grateful to Yu. Kagan and V. Sobakin for fruitful consultation." Orig. art. has: 2 figures. 11/5 14,5

ASSOCIATION: none

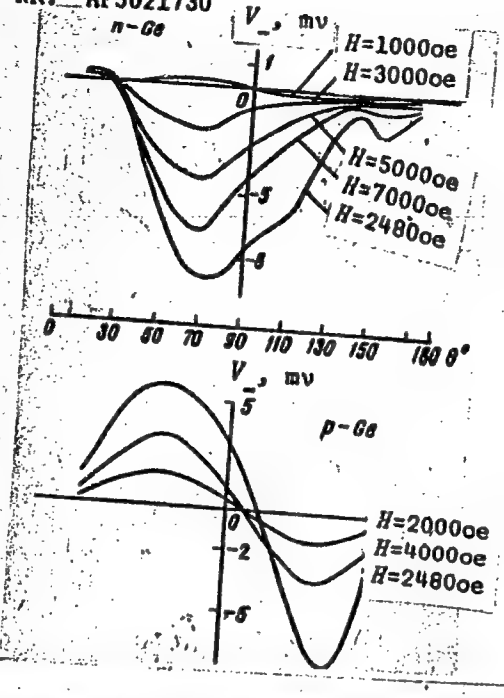
SUBMITTED: 25May65 ENCL: 02 SUB CODE: SS, EM

NO REF SOV: 002 OTHER: 001

Card 2/4

L 00755-66

ACCESSION NR: AP5021730



ENCLOSURE: 01

Fig. 1

Card 3/4

L 00755-66

ACCESSION NR: AP5021730

ENCLOSURE: 02

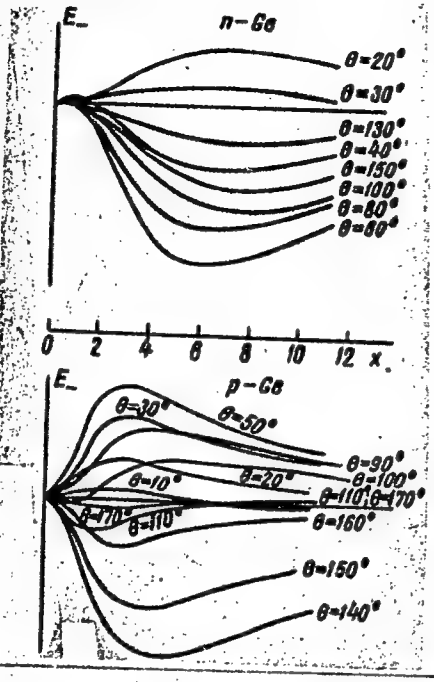


Fig. 2

Card 4/4

L 8155-66 EWT(l)/EWT(m)/EWP(b)/EWP(t) IJP(c) JD

ACCESSION NR: AP5019895 UR/0181/65/007/008/2564/2565

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

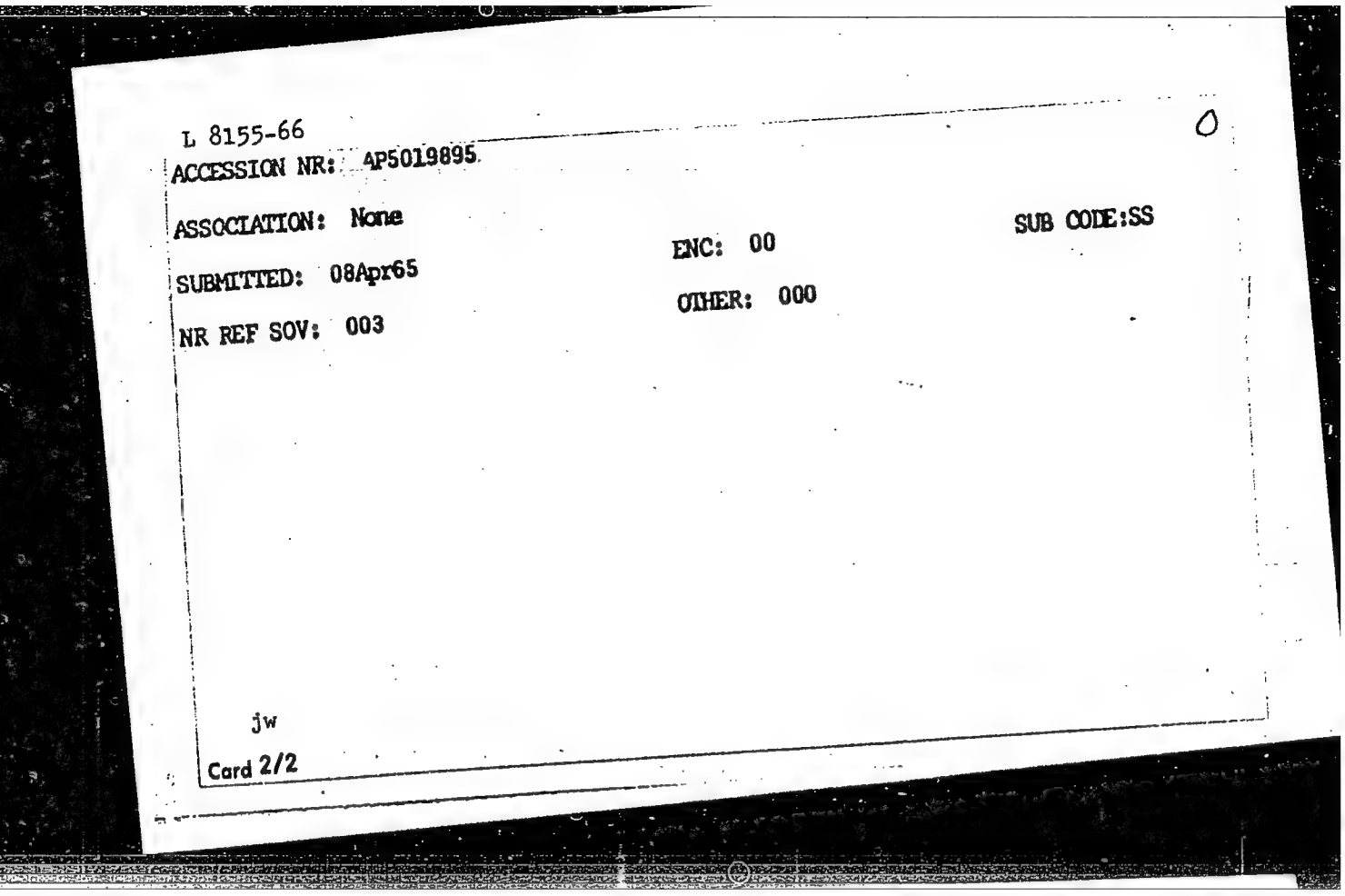
TITLE: On the anisotropy of the even photomagnetic effect in p-germanium in strong magnetic fields

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2564-2565

TOPIC TAGS: germanium, photomagnetic effect

ABSTRACT: This is a continuation of earlier work by the authors (ZhETF v. 39, 11, 1960) on the anisotropic even photomagnetic effect in n-germanium. The present investigation was made on p-germanium and its purpose was to check on a detailed theory of anisotropic photomagnetic effect, developed by Yu. M. Kagan and V. N. Sobakin in a companion paper (FTT v. 7, 2565, 1965, Acc. nr. 5019896). The investigated germanium sample was cut in such a way that the normal to the illuminated surface of the sample coincided with the (111) crystallographic axis. The measurements were perfectly analogous to those made in the earlier investigation by the authors. The experimental data agreed fully with the theory of Kagan and Sobakin. "The authors thank Yu. M. Kagan and V. N. Sobakin for a fruitful discussion of the results." Orig. art. has: 2 figures.

Card 1/2



L 8155-66 0

ACCESSION NR: AP5019895

ASSOCIATION: None

SUBMITTED: 08Apr65 ENC: 00 SUB CODE:SS

NR REF SOV: 003 OTHER: 000

jw

Card 2/2

L 28885-66 EWT(1) IJP(c)

ACC NR: AP6018700 SOURCE CODE: UR/0386/66/003/011/0434/0436

27
B

AUTHOR: Kikoin, I. K.; Lazarev, S. D.

ORG: none

TITLE: Oscillations of the photomagnetic effect with the magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 11, 1966, 434-436

TOPIC TAGS: indium compound, antimonide, photomagnetic effect

ABSTRACT: To check whether in indium antimonide the photomagnetic effect oscillates with the magnetic field, the authors measured both the even and odd photomagnetic emf's in InSb in magnetic fields up to 23,000 oe at liquid-helium temperature (4.2K). The sample, with carrier density 10^{15} at/cm^3, was equipped with two sets of mutually perpendicular electrodes to measure the odd and even photomagnetic emf's, respectively. The even effect was measured with the sample inclined 30° to the magnetic field. The even emf was measured in the direction of the projection of the field on the plane of the sample. Plots of the emf's against the field show that the oscillations begin at the relatively low value 2000 oe for the odd photomagnetic effect and 4000 oe for the even one. The data for the odd effect agree qualitatively with the theory developed by V. N. Sobakin (Dokl. AN SSSR v. 167, 71, 1966). There is as yet no quantitative theory for comparison with the results on the even effect. Orig. art. has: 1 figure. [02]

SUB CODE: 20/ SUBM DATE: 30Mar66/ ORIG REF: 002/ ATD PRESS: 5006

Card 1/1 CC

LAZAREV, Sergey Fedorovich
Soil Science
Microbiology

DECEASED
c. '63

1963/
/4

LAZAREV, S.F., kand. sel'skokhoz. nauk

Microbiological processes in soils of the natural zones in Central Asia. Agrobiologiia no.1:29-36 '64 (MIRA 17:8)

1. Nauchno-issledovatel'skiy institut pochvovedeniya, Tashkent.

LAZAREV, S.G.

Diphenylamine reaction, McClure-Aldrich test, and Nesterov's test in microfocus pneumonia among breast-fed children with rickets. Zdravookhranenie 3 no.3:12-18 My-Je '60.
(MIRA 13:7)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta (zav. - kand.med.nauk F.M. Kitikar') i kafedry biokhimii (zav. - prof. M.S. Mikhlin) Kishinevskogo instituta.
(PNEUMONIA) (MEDICAL TESTS) (RICKETS)

LAZAREV, S.G.

Reciprocal effect of pneumonia and rickets. Zdravookhranenie 4 no.3:46-52 My-Je '61. (MIRA 16:7)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta (ispolnyayushchiy obyazannosti zaveduyushchego kand.med.nauk F.M. Kirikar') i kafedry biokhimii (zav.prof.M.S.Mikhlin) Kishinevskogo meditsinskogo instituta.
(PNEUMONIA) (RICKETS)

SOV/96-58-11-16/21

AUTHOR: Lazarev, S.I., Engineer

TITLE: On the Economics of Installation for Chemical Purification of Boiler Feed-Water (K voprosu ekonomiki ustanovok po khimicheskoy ochistke vody dlya parovykh kotlov)

PERIODICAL: Teploenergetika, 1958, Nr 11, p 85 (USSR)

ABSTRACT: This brief article opens with a number of basic considerations on the subject of water treatment, on the general lines that the water purification plant is a small part of the total cost of a power station and should therefore be well designed and installed because it is so important. Schematic diagrams of a number of methods of water purification are given. Promenergoproyekt has made comparative calculations of the initial capital cost of a number of water purification installations with outputs from 10 - 100 m^3/hr; the figures are tabulated. The costs relate to water-treating plants in a separate building some 50 metres from the main building of a power station with high-pressure boilers. Power stations for pressures above 100 atm now being

Card 1/2

SOV/96-58-11-16/21

On the Economics of Installation for Chemical Purification of Boiler Feed-Water

designed by Promenergoproyekt use two main water-treatment systems: sodium cation treatment with preliminary lime treatment and magnesium de-silication in clarifiers. The capital costs of the latter are higher than those of the former by about 10 - 15%. A system with complete ion exchange treatment is also used. There is 1 figure and 1 table.

Card 2/2

LAZAREV, S.I.

Improvement in work with specialists is decisive condition for all industrial achievements. Transp. stroi. 11 no.2:1-4 F '61. (MIRA 14:2)

(Transportation--Buildings and structures)

LAZAREV, S.S., inzh.

Control unit of central high-voltage substations. Elek. sta. 29 no.4:59-63 Ap '58. (MIRA 11:8)
(Electric substations)

KAZAK, N.A., dots.; LAZAREV, S.S., inzh.

Utilization of circuit breakers as operational devices. Elek sta. 30 no.2:62-64 F '59. (MIRA 12:3)
(Electric circuit breakers)

CHILIKIN, M.G., doktor tekhn.nauk, prof.; BIRYUKOV, V.G., kand.tekhn.nauk
BARDYBAKHIN, I.P., inzh.; LAZAREV, S.S., inzh.

Review of the sections on electric machines and transformers, electrical apparatus, electrification of industry, and electrification of transportation and agriculture, of the "Referativnyi Zhurnal: Elektrotekhnika." Elektrichestvo no. 11:95-96 N '60.
(MIRA 13:12)

(Electric engineering--Periodicals)

LAZAREV, S.V.

Work organization in repair shops of metallurgical plants.
Metallurg no.7:7-8 Jl '56. (MLRA 9:9)

1.Otdel truda i zarplaty Ministerstva chernoy metallurgii SSSR. (Metallurgical plants)

MAYZEL'S, David L'vovich. Prinimali uchastiye: LAPIN, L.Yu., inzh.; LAZAREV, S.V., inzh.; YAKOVLEV, N.I., red.

[Organization, planning and financing of capital construction in the ferrous metal industry] Organizatsiia, planirovanie i finansirovanie kapital'nogo stroitel'stva v chernoi metallurgii. Moskva, Metallurgiia, 1965. 325 p.
(MIRA 18:10)

LAZAREV, S.V.; BORODAVKIN, A.N.; DROZNIN, Ye.A.

Potentialities of cost reduction of the production of metallurgical plants. Stal' 22 no.12:1124-1128 D '62. (MIRA 15:12)
(Iron industry—Costs) (Steel industry—Costs)

LAZAREV, S.V.; BORODAVKIN, A.N.; DROZNIN, E.A.

Some problems of work organization at the Dzerzhinskii and Zaporozhstal' metallurgical plants. Stal' 23 no.2:172-173 F '63. (MIRA 16:2)
(Dneprodzerzhinsk—Iron and steel plants—Management)
(Zaporozh'ye—Iron and steel plants—Management)

LAZAREV, T.M., kand.sel'skokhozyaystvennykh nauk; BOGOMYAGKOV, S.T., kand.sel'skokhozyaystvennykh nauk; NIKIFOROVA, Ye.G.

"Barnaul'skaia 32" spring wheat. Agrobiologiia no.6:911-912 N-D '61. (MIRA 15:2)

1. Altayskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva, g. Barnaul.
(Wheat—Varieties)

LAZAREV, T.M., dotsent; MAMEDOV, Z.M., professor, zasluzhennyy deyatel' nauki, direktor.

Torsion of the spleen in splenomegaly. Khirurgiia no.3:72 Mr '53. (MLRA 6:6)

1. Klinika obshchey khirurgii Azerbaydzhanskogo meditsinkogo instituta. (Spleen--Diseases)

LAZAREV, T.M.

Unusual reverse movement of calculi of the ureter. Urologiia 21 no.4: 56 O-D '56. (MIRA 10:2)

1. Iz kliniki vosstanovitel'noy khirurgii (zav. - dotsent T.M. Lazarev) Bakinskogo nauchno-issledovatel'skogo instituta ortopedii i vosstanovitel'noy khirurgii.
(CALCULI, URINARY) (URETERS--SURGERY)

LAZAREV, T.M., dotsent (Baku, Armenikend, dom spetsialistov no.2., blok 1, kv.8); ATAYEV, I.A.

Splenectomy in case of an twisted spleen. Vest.khir. 78 no.3: 110-111 Mr '57. (MLRA 10:6)

1. Iz khirurgicheskogo otdeleniya (zav. - I.A.Atayev) bol'nitsy Zakatal'skogo rayona Azerbaydzhanskoy SSR.
(SPLEEN, surg.
excis. in enlarged twisted spleen (Rus))

DILIGENSKIY, V., inzh.; LAZAREV, V., kand.tekhn.nauk; LITKHAR, M., inzh.

Burning liquefied gas. Zhil.-kom.khoz. 7 no.12:19-20 '57. (MIRA 11:12)

(Liquefied petroleum gas) (Stoves, Gas)

LAZAREV, V.

Industrial hygiene for adolescents. Okhr. truda i sots. strakh. 6 no.6:34-36 Je '63. (MIRA 16:8)

43921

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S/208/62/002/004/007/008
I027/I227

AUTHORS: Lazarev, V. and Piyl', Ye. (Moscow)

TITLE: On some classes of finite automata

PERIODICAL: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 2, no. 4, 1962, 695–702

TEXT: The authors describe a method of reducing the number of internal states of a given finite automaton. This subject was dealt with before by the authors (ref. 4: AN SSSR, Dokl, 1962, 1962, 143 no. 5, 1064–1066) and in the English-language references. But there the finite automata were described by the equations

$$\chi(p) = \phi[\chi(p-1),\ \rho(p-1)],\quad \lambda(p) = \Gamma[\chi(p),\ \rho(p)], \qquad (1)\text{–}(2)$$

where $\rho(p)$, $\lambda(p)$, $\chi(p)$ are the input, output and internal state at the moment p, respectively. Here new classes of finite automata are studied, in which the output and the internal state at the moment $p+1$ may also depend on the states of the automaton at the transition from $p-1$ to p. The method of reduction is on the extension of the previous methods, and is based also on identifying equivalent or pseudo-equivalent internal states. There are 13 tables. The most important English language references are: D. A. Huffman, J. Franklin Inst., 1954, 257 no. 3, 161–190; no. 4, 275–303; D. D. Autenkamp, IRE. Trans., 1958, EC–7, no. 4, 299–306; S. Ginsberg, IRE. Trans., 1959, EC–8, no. 3, 346–355.

SUBMITTED: February 23, 1962

Card 1/1

LAZAREV, V.A.

Installing arched tenters on a finishing unit in front of the "Chasing" calenders for each cloth. Obm.tekh.opyt. [MLP] no.10:33-34 '56. (MIRA 11:11)
(Textile machinery)

LAZAREV, Valentin Afanas'yevich; MANZHOS, Yu.A., inzh., retsenzent; KARPOV, D.T., inzh., retsenzent; YEMEL'YANOV, Yu.V., nauchnyy red.; SMIRNOV, Y.I., red.; FRUMKIN, P.S., tekhn. red.

[Automobile engines in launch building] Avtomobil'nye dvigateli v katerostroenii. Leningrad, Gos. soiuznoe izd-vo sudostroit.promyshl. 1961. 258 p. (MIRA 14:6)
(Marine engines) (Automobles—Engines)

L 2471-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5021370 UR/0120/65/000/004/0225/0225
539.1.074.5

AUTHOR: Lazarev, V. A.

TITLE: Surface-barrier particle counters from p-type silicon

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 225

TOPIC TAGS: surface barrier particle counter, p type counter, n type counter

ABSTRACT: Antimony was tried as a contact material in p-type surface-barrier particle counters after the unsatisfactory performance of gold contacts. Antimony with a resistivity of 3600 and 1800 ohm-cm was vacuum-deposited under 10^{-5} mm Hg. The resulting counters could withstand up to 300 v of reverse voltage; reverse current density was 5 μamp/cm^2 at 15 v. The counters were tested with a Po^{210} α-particle source and their counting efficiency and resolution were found to equal that of n-type surface-barrier counters with vacuum-deposited gold contacts. [WC]

ASSOCIATION: Institut fiziki poluprovodnikov SO AN SSSR, Novosibirsk (Institute of Semiconductor Physics, SO AN SSSR)

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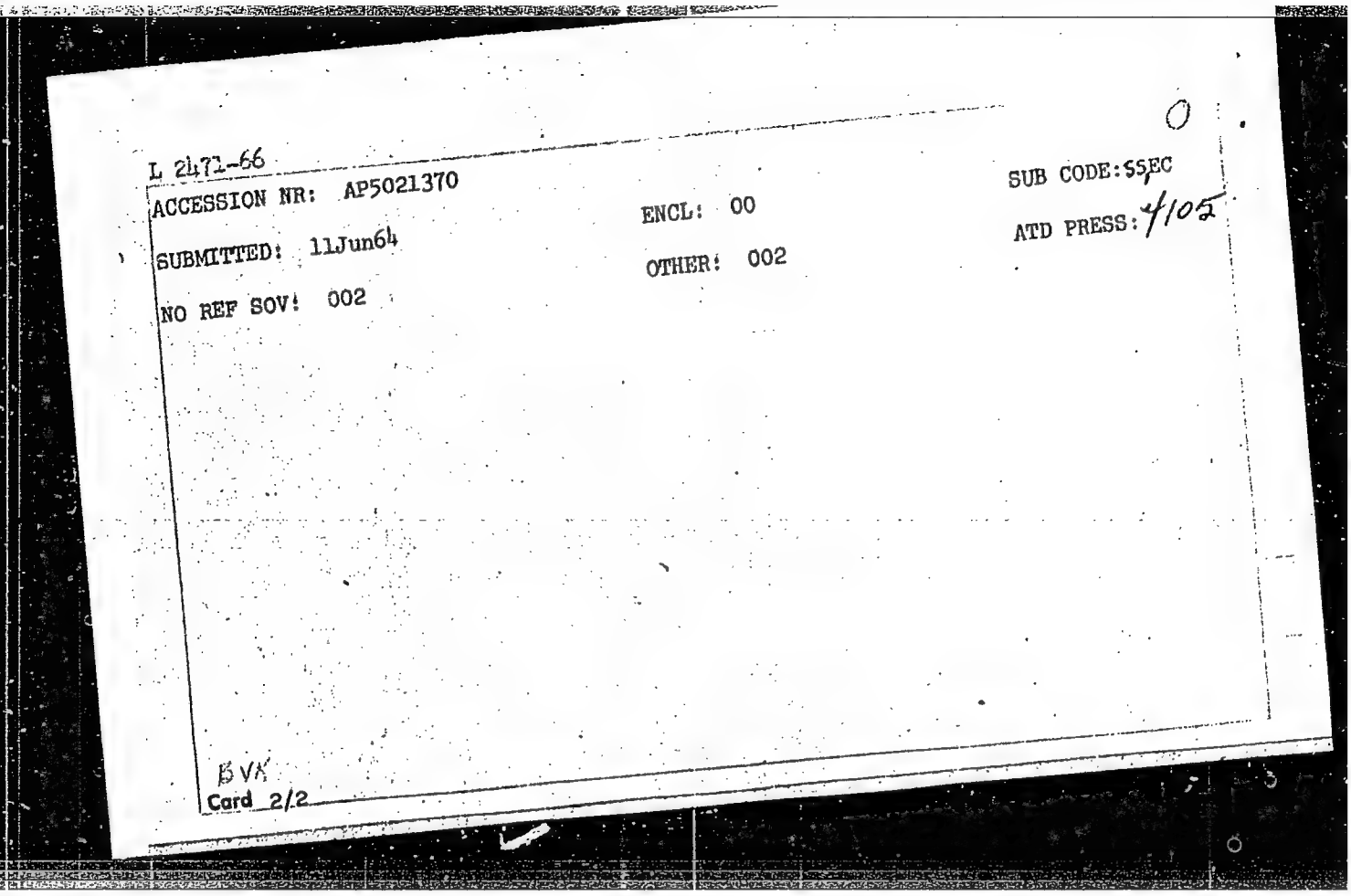

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ACCESSION NR: AP5021370

SUBMITTED: 11Jun64

NO REF SOV: 002

ENCL: 00

OTHER: 002

SUB CODE: SS, EC

ATD PRESS: 4105

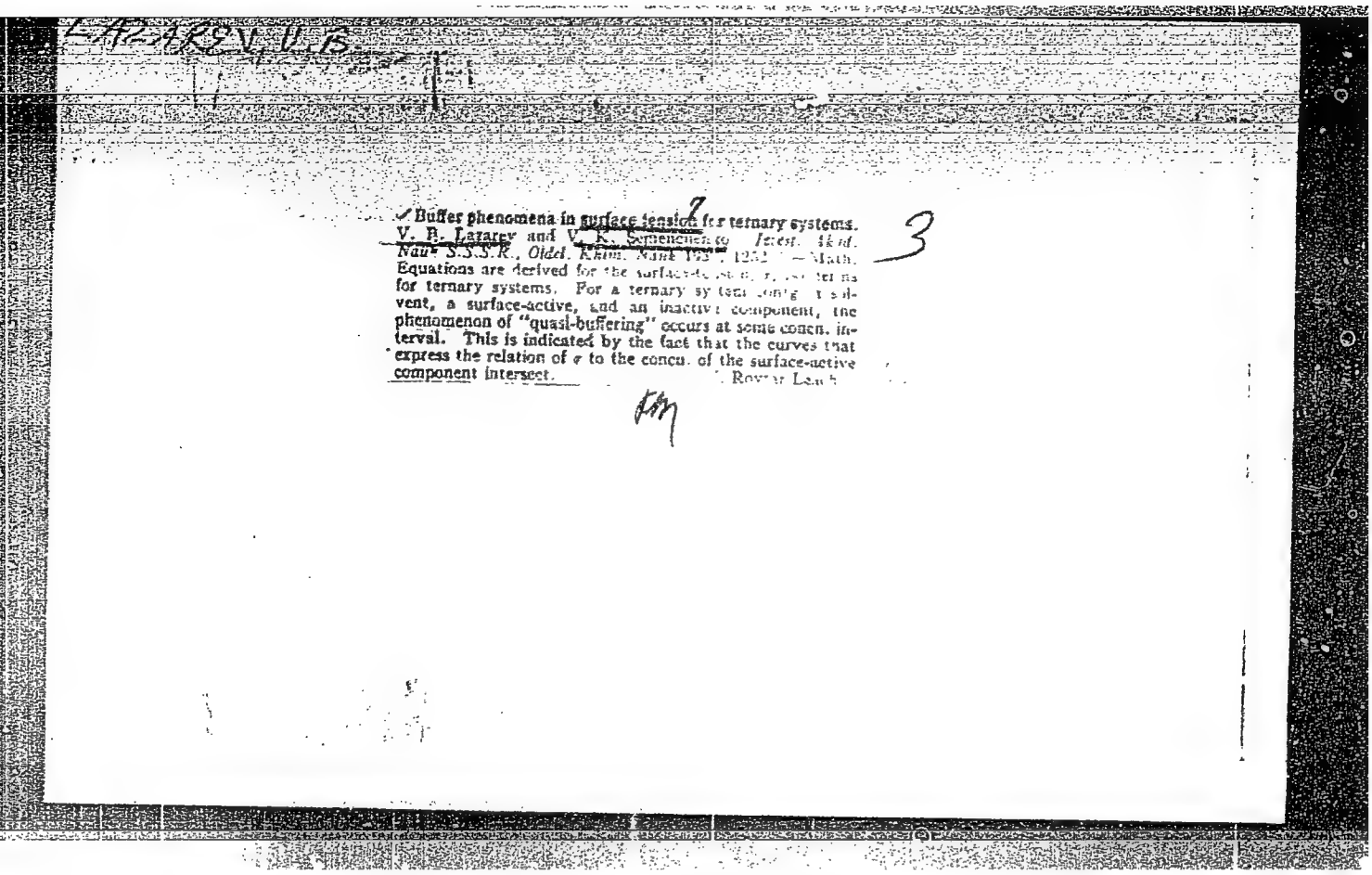
BVK

Card 2/2

LAZAREV, V.B.

SEMENCHENKO, V.K.; PIKROVSKIY, N.L.; LAZAREV, V.B.

Effect of small admixtures on polymorphic transformations in tin. Doklady Akad. Nauk S.S.S.R. 89, 1021-4 '53. (MLRA 6:4)
(CA 47 no.20:10306 '53)



Buffer phenomena in surface tension for ternary systems. V. B. Lazarev and V. K. Semenchenko. *Izvest. Sektora Fiz.-Khim. Analiza Inst. Obshch. i Neorg. Khim. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1953, 1252. — Math. Equations are derived for the surface-active properties for ternary systems. For a ternary system containing a solvent, a surface-active, and an inactive component, the phenomenon of "quasi-buffering" occurs at some concn. interval. This is indicated by the fact that the curves that express the relation of σ to the concn. of the surface-active component intersect. — Reviewer Lewis

LAZAREV V.B.

AUTHOR PUGACHEVICH P.P., LAZAREV V.B. PA - 2918

TITLE Surface tension of ternary metal solutions Hg - Cd - K at 22° C. (Poverkhnostnoye natyazheniye troynykh metallicheskikh rastvorov Hg - Cd - K pri 22°.- Russian)

PERIODICAL Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 1, pp 127-129 (U.S.S.R.)

Received: 6/1957 Reviewed: 7/1957

ABSTRACT Many phenomena of the influence of admixtures on the properties of solid and liquid poly-component metal solutions can apparently be explained by studying the surface tension of such smeltings. In the case of iron alloys the influence of admixtures and of gases has hitherto usually been investigated by assumming the basic composition of the alloy to be unchargeable. It may be assumed, that the phenomena of absorption in ternary metal solutions will be little different from similar phenomena in other classes. It will be of special interest to study the case in which one of the diisolved metals possess surface activity with respect to the solvent, whereas the other has no surface activity. It is to be expected in the case of specific concentrations of the component with surface - activity (buffer-concentration according to Semenchenko) that the surface tension of the ternary

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Surface tension of ternary metal solutions Hg - Cd - K at 22° C. PA - 2918

metal solution is independent of the concentration of the component lacking surface activity. This implies that the same laws are to be exspected for the modification of surface tension as have been observed by W. Seit, S. Politzsch and V.K. Semenchenko in the study of binary dielectric solutions in the presence of electrolytes. For the purpose of verifying the conclusions of Semenzhenko's theory of the modification of the surface tension of solutions of various classes, the authors investigated the surface tension of the system of Hg -Cd -K. Potassium is surface-active with respect to mercury, whereas Cadmium is supposed to augment the surface tension of mercury. If the components were chosen in the right way, the buffer-concentration could be found by studying surface tension. The authors established that in the case of various concentrations of potassium surface tension is indepentend of the concentration of the surface-inactive Cadmium. This concentration of potassium corresponds to the buffer-concentration Cadmium has the opposite effect in the case of solutions that contain an amount of potassium exceeding the buffer-concemn-

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PA - 2918

Surface tension of ternary metal solutions Hg - Cd - K at 22°C.

tration, i.e. the Cadmium - concentration decreases surface tension. Furthermore, the authors found out that Cadmium increases the surface tension of mercury and therefore is surface-inactive with respect to mercury. Consequently, the authors evere able to confirm the conclusions of the molecular theory of surface phenomena developed by Semenchenko on common absorption processes in polycomponent solutions from different classes. (With 4 illustrations and 13 citations from published works.)

ASSOCIATION: Institute for General and Anorganic Chemistry "N.A.KURSANOV" of the Academy of Sciences of the USSR.
(Institut obshchey i neorganicheskoy khimii im N.A. Kursanova Akademii Nauk SSSR.)

PRESENTED BY: I.I. Chernyayev, member of the Academy.

SUBMITTED: 27.10. 1956.

AVAILABLE: Library of Congress.

CARD 3/3

LAZAREV, V.B

AUTHORS: Pugachevich, P. P., Lazarev, V. B. 20-3-24/52

TITLE: Surface Phenomena in Hg - Cd-K, Hg -Cd - Cs Trinary Metallic Solutions at 22° (Poverkhnostnyye yavleniya v troynykh metallicheskikh rastvorakh Hg-Cd-K, Hg-Cd-Cs pri 22°)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 3, pp. 445-447 (USSR)

ABSTRACT: The authors had hitherto investigated the surface tension σ of 135 solutions Hg-Cd-Cs at 22° by means of a device described in a previous work (Ref. 2). These solutions contain from 0 to 6.98 atom percent cadmium and from 0 to 0.036 atom percent cesium. In this system also a concentration buffer state was observed. A comparison of the isotherms of the surface tension of the trinary metallic solutions of the isotherms of aqueous solutions of alcohols in the presence of electrolytes furnished additional confirmation of the principal result of the molecular theory of surface tensions developed by V. K. Semenchenko (Ref. 4-6). From 2 diagrams mentioned here the following may be seen: In the trinary metal solutions (as well as in the aqueous solutions of dielectrica in the presence of surface-inactive components) the buffer point is shifted in the

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direction of lower concentrations. The amount of this shifting depends on the degree to which the surface-active component is replaced in the solution under investigation by a component with greater surface activity. Next, some information is given concerning the theory developed by V. K. Semenchenko (Ref. 4, 5, 6). From this theory it follows, among other things; that in a trinary system, one component of which is surface-active with respect to the solvent (while the other component is surface-inactive), the adsorption of the surface-active component is positive and passes through a maximum. The maximum value of adsorption grows with growing concentration of the surface-inactive substance. There are 4 figures and 8 references, 6 of which are Slavic.

ASSOCIATION: Institute for General and Inorganic Chemistry AN USSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

Surface Phenomena in Hg - Cd-K, Hg -Cd - Cs Trinary Metallic Solutions at 22°

20-3-24/52

PRESENTED: May 16, 1957, by I. I. Chernyayev, Academician

SUBMITTED: May 14, 1957

AVAILABLE: Library of Congress

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SOV/137-59-3-5057 D

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 24 (USSR)

AUTHOR: Lazarev, V. B.

TITLE Investigation of the Surface Tension of Ternary Hg-Cd-K & Hg-Cd-Cs (Issledovaniye poverkhnostnogo natyazheniya troynykh metallicheskikh rastvorov Hg-Cd-K, Hg-Cd-Cs)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Chemical Sciences, presented to the In-t obshch. i neorgan. khimii AN SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences, USSR), Moscow, 1958

ASSOCIATION: In-t obshch. i neorgan. khimii AN SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences, USSR), Moscow

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